

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application:

Listing of Claims:

- 1 1. (Withdrawn) An apparatus for control of a fluid flow, comprising:
2 measuring means for measuring a pump performance parameter; and
3 controller means for adjusting a fluid flow in response to the pump performance
4 parameter.
- 1 2. (Withdrawn) The apparatus of claim 1 wherein the measuring means comprises at least
2 one sensor for measuring at least one of a pump speed, voltage, electric current, and
3 electric power.
- 1 3. (Withdrawn) The apparatus of claim 1 wherein the measuring means comprises at least
2 one of a voltage sensor, an electric current sensor, an electric power sensor, and a multi-
3 component sensor.
- 1 4. (Withdrawn) The apparatus of claim 1 wherein the controller means comprises a process
2 control computer for adjusting operation of at least one of a flow-control means and a
3 pump.
- 1 5. (Withdrawn) The apparatus of claim 4 wherein the flow-control means comprises at least
2 one of a valve, a pneumatic actuator, an electric actuator, a hydraulic actuator, and a
3 micro-electric actuator.
- 1 6. (Withdrawn) The apparatus of claim 4 wherein the pump comprises a centrifugal pump.
- 1 7. (Withdrawn) An apparatus for control of a fluid flow, comprising:
2 measuring means for measuring a pump performance parameter;
3 means for comparing a measured pump performance parameter to a predetermined
4 target pump performance parameter; and
5 controller means for adjusting a fluid flow in response to a difference in the

1 measured pump performance parameter and the predetermined target pump performance
2 parameter.

- 1 8. (Withdrawn) The apparatus of claim 7 wherein the measuring means comprises at least
2 one sensor for measuring at least one of a pump speed, voltage, electric current, and
3 electric power.

- 1 9. (Withdrawn) The apparatus of claim 7 wherein the measuring means comprises at least
2 one of a voltage sensor, an electric current sensor, an electric power sensor, and a multi-
3 component sensor.

- 1 10. (Withdrawn) The apparatus of claim 7 wherein the controller means comprises a process
2 control computer for adjusting operation of at least one of a flow-control means and a
3 pump.

- 1 11. (Withdrawn) The apparatus of claim 10 wherein the flow-control means comprises at
2 least one of a valve, a pneumatic actuator, an electric actuator, a hydraulic actuator, and a
3 micro-electric actuator.

- 1 12. (Withdrawn) The apparatus of claim 10 wherein the flow-control means comprises means
2 for adjusting a system element to change the resistance to flow.

- 1 13. (Withdrawn) The apparatus of claim 10 wherein the pump comprises a centrifugal pump.

- 1 14. (Withdrawn) The apparatus of claim 7 further comprising means for delivering the fluid
2 flow to means for performing a supercritical process.

- 1 15. (Withdrawn) An apparatus for control of a fluid flow, comprising:
2 a pump;
3 a sensor for measuring a pump performance parameter; and
4 a controller for adjusting operation of the pump to control a fluid flow in response
5 to the pump performance parameter.

- 1 16. (Withdrawn) The apparatus of claim 15 wherein the pump performance parameter
2 comprises at least one of a pump speed, voltage, electric current, and electric power.

- 1 17. (Amended) A system for supercritical processing of an object, comprising:
2 a. _____ means for performing a supercritical process;
3 b. _____ means for measuring a pump performance parameter; and
4 c. _____ means for adjusting operation of a pump to control a fluid flow in response
5 to the pump performance parameter.
- 1 18. (Amended) The system of claim ~~19~~ 17 wherein the object is a semiconductor wafer for
2 forming integrated circuits.
- 1 19. (Amended) The system of claim ~~19~~ 17 wherein the means for performing a supercritical
2 process comprises a processing chamber and means for circulating at least one of a
3 gaseous, liquid, supercritical and near-supercritical fluid within the processing chamber.
- 1 20. (Amended) The system of claim ~~21~~ 19 wherein the means for circulating is a means for
2 circulating a the fluid comprising carbon dioxide.
- 1 21. (Amended) The system of claim ~~22~~ 20 wherein at least one of solvents, co-solvents and
2 surfactants are contained in the carbon dioxide.
- 1 22. (Amended) The system of claim ~~19~~ 17 wherein the pump performance parameter
2 comprises at least one of a pump speed, voltage, electric current, and electric power.
- 1 23. (Amended) The system of claim ~~19~~ 17 further comprising means for delivering the fluid
2 flow to the means for performing a supercritical process.
- 1 24. (Withdrawn) A method of control of a fluid flow, comprising the steps of:
2 a. measuring a pump performance parameter; and
3 b. adjusting a fluid flow in response to the pump performance parameter.
- 1 25. (Withdrawn) The method of claim 26 wherein the pump operational parameter comprises
2 at least one of a pump speed, voltage, electric current, and electric power.

- 1 26. (Withdrawn) A method of eliminating flow meter contamination in semiconductor wafer
2 processing with a fluid, comprising the steps of:
3 a. measuring a pump operational parameter; and
4 b. adjusting operation of a pump to control a fluid flow in response to the pump
5 operational parameter.

- 1 27. (Withdrawn) A method of control of a fluid flow, comprising the steps of:
2 measuring a pump performance parameter;
3 comparing a measured pump performance parameter to a predetermined target
4 pump performance parameter; and
5 adjusting a fluid flow in response to a difference in the measured pump
6 performance parameter and the predetermined target pump performance parameter.

- 1 28. (Original) A method of control of a fluid flow in a supercritical processing system,
2 comprising the steps of:
3 a. defining a system curve including a point of operation;
4 b. using the system curve to define at least one of a predetermined pump speed,
5 voltage, electric current, and electric power;
6 c. measuring performance of a pump to obtain at least one of a measured pump
7 speed, voltage, electric current, and electric power;
8 d. comparing the at least one of a measured pump speed, voltage, electric current,
9 and electric power to the at least one of a predetermined pump speed, voltage,
10 electric current, and electric power;
11 e. adjusting operation of a pump to control a fluid flow in response to a difference in
12 the at least one of a measured pump speed, voltage, electric current, and electric
13 power and the at least one of a predetermined pump speed, voltage, electric
14 current, and electric power.